FREQUENTLY ASKED QUESTIONS

ICE HOUSE® DISTRIBUTION

1. What benefit will I get from water-cooling?

a. Water-cooling your garden will give you many benefits, most importantly removing the heat that is generated from the high-intensity grow lights in your garden! By utilizing water-cooling, the bulb heat generated can be completely removed from the environmental equation – thus allowing for cooler gardens, happier plants, and less stress on both you and your plants.

b. Cooling via water allows you to place the lights lower down on your plant canopy – offering better light penetration, increased lumens, and more vigorous growth – without hurting the plants from excessive heat this would cause using uncooled or in some cases, poorly air-cooled systems.

c. Efficiency! Water is scientifically proven as a better heat absorbent than heat. Water has a thermal conductivity of 0.6W (m*K) which is much higher than the thermal conductivity of air which is only 0.03W/(m*K) – and a much higher specific heat capacity than air. What this means is that **water can absorb and remove from your garden 4 times the heat nearly 20 times faster than air!** Thus the energy that is produced by the chiller used to chill the water is not wasted ! Studies have shown that around 70% of the power consumed by an AC system goes to POWERING THE SYSTEM – not cooling the air. So you are only getting 30% cooling capacity for the same amount of electricity used. Talk about saving power!

d. Water cooling can allow you to create a "sealed room" garden. Since no holes are cut in your room to duct air (either via air conditioning or air-cooled fans), you can more accurately control your internal environment. External CO2 is not sucked out of the room, odors are controlled, and your internal garden variables are much more easily controlled. You can actually install fresh air exchange that you control if you prefer to introduce fresh air from time to time, instead of plugging leaks or fighting against a leaky room.

2. Isn't water cooling complicated?

Water cooling is no more complicated than any of the other systems or things required to garden indoors. If you grow hydroponically, you already use pumps, water, reservoirs, etc.. which you also do setting up a water-cooled system. If you've set up a garden and have wired electricity, then you have already done more complicated work than setting up a water-cooled garden! Simply put – a water-cooled system is nothing more than a reservoir holding water, a pump that recirculates that water through a chiller (which of course is what is making that water cold), then the transport system that carries that cold water through your water-cooled devices and the hot water back to the reservoir. Simple systems can be setup in minutes, more complicated ones in hours.

Humidity and Condensation

3. Why do I have condensation on my manifolds and cold water lines?

Condensation is the result of the cold water in the manifolds and lines reaching the dew point in the room, which causes them to "sweat". This does NOT add additional moisture to the room, rather it is turning the water vapor in the air back into water due to the cold water inside the lines meeting the humid air. ***The rule of thumb is to keep your room below 50% humidity in order to avoid condensation.***

4. What can I do if I can't cool with a higher water temperature to avoid condensation?

If you can't sufficiently cool with a higher water temperature you may need to add heat exchanger or flow more air across the heat exchangers you have which will make them more efficient. One example is that you can daisy chain 3 reflectors together and put on one ice box – which will cool it just as well as three ice boxes but the water has to be much colder than if using 3. Your room is the same way. If you don't have enough heat exchange in your room your water will need to be colder than it has to be. Alternatively, increasing the air flow will do the same thing. So there is an inverse relationship between airflow and water temperature – bringing the two together (raising or lowering water temperature, adding or subtracting air flow) will help you to dial in the desired room environment conditions.

5. What can I do to eliminate or reduce condensation?

As mentioned, to reduce condensation you must either raise the water temperature, or reduce the humidity. Reducing humidity can be done by using external dehumidifiers, and there are water-cooled dehumidifiers available to reduce humidity and avoid introducing more heat into your room. If condensation is a huge problem, you may want to use wall mount brackets and ducting to keep Ice Boxes away from reflectors and bulbs.

6. Does running cold water to Ice Boxes or other water-cooled growing products ADD condensation?

This is a common question due to the condensation that often arises when running cold water lines into a room to chill Ice Box cooled lights and HydroGEN water-cooled CO2 generators. Condensation is produced by the existing water vapor in the air becoming liquid – so the answer is NO! Higher humidity in your grow room combined with very cold water lines will cause the lines to condensate due to the cold water attempting to "cool the room" because it is lower than the ambient room temperature. Lower the room humidity, and the condensation disappears. Often, using undersized chillers for the number of lights or extra heat sources in the room causes the chiller to have to be set at a lower temperature just to maintain the desired temperature – which in combination with humidity in the room – causes this. The solution? Make sure you optimize your chiller taking into consideration ALL sources of heat in your room (ballasts, dehumidifiers, etc..) so that you are not having to run your water super-cool –and also, dehumidify the room!

Cooling Control / Airflow

7. Am I really saving money if I'm just trading the electricity of an AC for that of a chiller?

Yes! Don't compare BTU to BTU or Amps to Amps when looking at chillers and AC units, because once again – it comes down to the SCIENCE of cooling. Because water is more effective and efficient than air cooling (See FAQ # 1.c for the science) – your chiller will operate more efficiently than your AC. When it reaches its desired cooling point – it shuts off! Many AC units (especially those being made to work overtime to cool hot grow rooms) run continuously and consume MUCH more power than a chiller. And as mentioned before, roughly 70% of the energy used to run an AC is to power up the AC, not even cool the room!

8. How do I control the temperature in my room using Ice Boxes and a chiller?

To control the temperature in your room, you must use a thermostat. Just like with any A/C system you need a way to control the temperature. Ice Box thermostats accomplish this same task. You plug the thermostat in to the wall and plug your fans in to it. The Ice Box thermostat will speed up and slow down the fans as cooling is needed. It has a photocell that allows you to set a nighttime temperature and a "lights on" temperature. What makes this controller unique is that during the "lights on" cycle the thermostat will idle down the fans but not turn them off to keep airflow through the hoods, but during the night cycle the fans will completely turn off when the desired temperature is met.

9. Do I have to have a fan and Ice Box for each reflector? Or can I use one fan for multiple reflectors and Ice Boxes?

Several reflectors can daisy chained together and all use one fan. You need approximately 250 cfm through each reflector...that doesn't meant that you need a 750 cfm for three reflectors. It means that the air flowing through each reflector needs to average 250 cfm, and the exiting air from the last reflector should be at this measurement. Several factors influence fan CFM, including bends or ducting in the chain, efficiency of the fan, as well as air leaks in reflectors or other connections.

10. At what temperature should I keep my water?

Typically you will want to keep your water around 65 degrees to be the most efficient and which typically doesn't create condensation at that temperature. If you have to keep your water colder than that you should increase your heat exchanger efficiency as mentioned above (by adding heat exchangers or additional airflow).

11. Can I "make AC" from using a chiller and get rid of my AC?

Yes, this is possible assuming all your variables are correctly sized and done right. By having a big enough chiller to more than cover the heat sources in your room (lights, water-cooled CO2 generators, ballasts, etc..) then by installing larger heat exchangers (Ice Boxes) connected to fans (we recommend 8" Ice Boxes with a fan directly attached) – you can create "spot AC" throughout your room. Not only that, but the air coming out of your light chain is also cooler. If you have the right chiller size and want to not only cool your lights but cool your room, then the rule of thumb is 20 degree temperature differential between what the chiller is set at and the desired room temperature (ex: chiller set at 55, desired room temp at 75). Experimentation is often required to "dial it in" and get the right water temperature.

12. What temperature does the water need to be set at for my room to be X degrees?

As mentioned above – this all depends on how many heat sources you have in your room. If you are just cooling lights, then a 10 degree temperature differential will effectively remove the heat from the bulbs in most cases. You may have to experiment based on your external environment (i.e. are you in the South where it is 105 degrees, are you running in a tent in a garage, etc…). This also assumes NO ADDITIONAL HEAT SOURCES IN THE ROOM! Ballasts (both magnetic and digital) emit a significant amount of heat that should be removed from the grow room for maximum cooling from your water-cooled system. If you can't remove them, then you will need to adjust the size of your chiller (larger), and run the water temperature lower.

Reservoir Considerations

13. Where do I place the reservoir? Inside or outside my room?

The reservoir should be in the room with your plants if the water is cooler or the same temperature as your room temperature. This way no energy would be lost out of the water with it being put in a warmer area. If the reservoir is put in a hot area, then it will condense and attempt to "cool" the external air which causes energy loss and the chiller to turn on to cool down the water. Thus, it is recommended to avoid placing the reservoir outside or in a hot environment if possible. Additionally, utilizing insulation on the outside of the reservoir will help eliminate energy loss.

14. Do I need a big reservoir? Will having a large reservoir enable me to use a smaller chiller?

It is a myth that you a need a huge reservoir for water cooling. (20) 1000w lights can be run off of 55 gallon barrel with a properly sized chiller. Large reservoirs used to be suggested because the chillers were undersized because that was all that was available. A large reservoir was used to store cooling energy before the lights would come on. Now, with the ultra-efficient and powerful CHILLKING® chillers, water temperature can be raised or lowered quickly and renders large reservoirs obsolete. Having a larger reservoir will not enable you to use a smaller chiller, except possibly in the case that a large submerged reservoir is used that keeps the water very cold at all times.

Chillers

15. What is the rule of thumb for how much chiller power I need for the amount of lights I'm running?

Depending on what configuration you use, (Ice Boxes vs. Fresca Sols) – on average, ¼ HP per 1000w light is the MINIMUM amount of chiller power you need. This assumes that there is NO other heat in the room (ballasts, dehumidifiers, HydroGEN water-cooled CO2 generators putting out hot water, etc..). Also, if your outside temperatures are 105 and you try this, you may be undersized. We recommend 1/3 HP per 1000w light for optimum cooling of both your lights and possibly your room. Better to oversize than undersize, so you are not fighting to stay cool.

16. Are the recommendations the same for marine chillers compared to the CHILLKING® custom water-cooled chillers?

These recommendations change if using an aquarium or reservoir chiller, typically we recommend doubling the rating of what we suggest. A 1 HP aquarium/reservoir chiller should be used for one light, if using a ChillKing chiller the same operation can be setup with a 1/2 HP chiller, saving you a lot of energy.

17. But the aquarium chiller I am looking at says it is a 1 HP chiller and can cool water very cold, what's wrong with these?

Aquarium chillers and commercial chillers are very different. Aquarium chillers are not made to used under a constant load of heat...they are designed to only maintain the temperature of a body of water, therefore the increasing heat from high-intensity lights or from CO2 burners is much more than they can handle, thus they do not operate as efficiently or anywhere near their ratings. We have tested these personally and noticed almost 50% less cooling capacity than their ratings. Customers have also noticed this, when they first purchased aquarium chillers and could not cool their lights with Ice Boxes, then switched to CHILLKING® chillers and saw the difference.

18. Can you give me some hard facts about why the CHILLKING® chillers you sell are truly better or more efficient?

Most chillers only put out 75% of what they are rated for and A/C systems only put out 60% of their rating no matter what brand. CHILLKING® chillers put what they are rated while using the same power as an A/C or another brand of chiller of a comparable size. For example a 6000 BTU A/C will typically only output 3,600 BTU of actual cooling. Aquarium or reservoir chillers rated at 6000 BTU typically only put out around 4,500 BTU, while the CHILLKING® outputs 100% of its rating with 6,000 BTU. All three units use the same amount of electricity. This is why when you switch to a WCS using CHILLKING® chillers your cooling cost will go down.

19. Can I put my chiller inside my house or in a side room?

If your room has sufficient ventilation and can be cool enough, then yes. However, putting a chiller in a garage that gets hot when it is 100 degrees outside will make that garage 120 degrees when the chiller is on – so it cannot get fresh air to effectively cool. All of the heat collected and removed out of your garden will come out of the back of the chiller. The water is simply transportation for the heat. We recommend putting the units outside (they look just like regular AC units) for maximum performance. Smaller chillers (<1/2 HP can often be used indoors if needed).

20. Some of the chillers you sell are really big – it would seem out of place next to my house. What solution do you have for that?

The CHILLKING® chillers we sell are actually converted AC units. So they are no different than having a large AC by the side of your house. However, if this is still a concern, we offer the smaller units (up to 2 HP) that have window unit attachments for mounting in a window (they are actually converted window unit ACs, so they have all the required parts) – so appearing to be an AC unit.

21. Can I put the chiller outside my house in a shed or covered?

Chillers are heat exchangers and must be used in a well ventilated areas. If using in an enclosed area where the temperatures get over 100 degrees it will greatly reduce the efficiency of your chiller. This should be considered when sizing a chiller for your system. The cooler the ambient temperature the more performance and efficiency you will get out of your chiller so if possible place the chiller in the shade.

22. I notice a setting on the chiller for temperature differential – what is this? Should I adjust it?

The temperature differential on the chiller should not be adjusted unless a large reservoir is used. The differential on the chiller keeps it from cycling on and off too often which will wear out or damage the unit before its time. Keep in mind that a chiller uses the most power starting up, if cycling on and off to often it will also increase the energy usage.

23. What about the water pump supplying the chiller – can I cycle this on and off?

No. You should not have the water turn on and off to the chiller, it must have constant water flow in order to work properly and to not be damaged. If the chiller runs without water flowing through the coils, they can freeze over and crack – ruining the chiller. If the water is disrupted to the chiller by pump failure the ChillKing chiller has a freeze protection sensor that will turn the chiller off before freezing if the water is not set below 55° degrees, temperatures can be run lower if using food safe propylene glycol.

24. Can I put the chiller on a timer to go off during the "lights off" cycle to save energy?

We recommend to leave the chiller and pump running 24hrs a day. When the lighting turns off the chiller will stop running and will only periodically turn on and off for a moment during the lights off cycle because there will not be any heat being added to the water. If using the chiller to air condition your garden the chiller and pump will have to run. The chiller and pumps will last longer and will be more dependable if left running and there is less likely a chance of problem if the pump doesn't start or gets an air lock. This suggestion is especially true if you have a large reservoir. If you MUST do this, the chiller can be turned on and off with the light cycle successfully if the pump and chiller are both set to the same timer, if doing so you should also have the chiller run 30 mins after and before the light cycle.

25. I got the recommended chiller for the number of bulbs I'm running – but my room just isn't cooling enough from the water-cooled system – is something wrong?

As mentioned in a FAQ above – then you have additional heat in the room. Ballasts, dehumidifiers, and other heat sources can make the "rules of thumb" for chiller size not adequate. Increase heat exchange by adding additional Ice Boxes, and/or increase the airflow over the heat exchangers by adding fans. If this does not solve the problem, then you must either remove the additional heat sources or get a bigger chiller.

Manifolds / Delivery System

26. I have several lights – what is the best way to run the lines from the pump / reservoir to each Ice Box attached to my lights?

That depends on your setup. For basic setups, having a pump with the outbound cold line and inbound hot line going straight to a single icebox or maybe 2 iceboxes is a solution. For larger setups, having a manifold that is attached to an external pump such as the Flotec pumps we sell enables you to run multiple lines off of it to each Ice Box or other water cooled devices. We offer multi-port manifolds for hooking up your water-cooled system depending on the size of your setup. In addition, we can create custom manifolds for you if requested.

27. What are the pipe specifications for building a water manifold?

For manifolds we recommend 1/2" PVC supply and 3/4" return for smaller systems using submersible utility pumps with a 1/6th (2 ports) or 3/10th hp (4 ports) and for larger setups we recommend 1" supply and 1 1/4" return manifold with at least a 1/2HP inline pump. All sizes of manifolds should use reducing T's to 1/2" to a 1/2" ball valve with a 1/2" hose barb.

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28. How big of a setup can I use a submersible pump to power my WCS?

Anything over 4 ports should switch to an inline pumps over a submersible pump. 4 ports could include 2 Ice boxes, a MiniGEN, and a reservoir cooler, or 4 ports could include only 4 Ice Boxes.

29. What is the recommended pump Gallons Per Hour (GPH) for a water-cooled system?

The recommended pump GPH for a 2 port system would be 1000 GPH at 10' of lift, for 4 port manifolds we recommend 1500 GPH at 10' of lift, for systems over 4-10 ports we recommend a quality centrifugal inline pump such as the Flotec cast iron pumps we carry with roughly 2500 GPH at 10' of lift, anything over 10 ports call us for proper sizing.

30. Do I need to use a "no-flow, no-go" sensor in my water manifolds to shut things off if the water pressure is not present to cool my system?

In case of pump or chiller failure a High Temperature Cut-Off switch should be used in the garden to turn off the lighting equipment if the temperature gets higher than what is acceptable. With the Ice Box system, a "no-flow, no-go" switch is not necessary if this simpler less expensive sensor is used to protect your garden. With that sensor you will never run the risk of damaging your crop with heat no matter what happens.

31. Why are manifolds built using different size tubing for the supply and return sections?

Having 2 different sized pipes and valves at each port on both sides will make the equipment flow evenly even though some tubes are longer than others. Also, the end must be capped a few inches after the last port, and there should not be a 90 at the end so that all the water pressure does not shoot to the end of the manifold upon turning on the pump, but instead is spread across the distribution ports. This is how it should be done for any size setup.

32. What options do I have using the Flotec pumps to supply my chiller, manifold, and other equipment?

The Flotec cast iron pumps have pump cover face bolts that enable direct connection to chillers or HydroGENs, as well as the normal exhaust outlet (for manifolds). These side ports of the pump use 1/4" NPT x 1/2" hose barb fittings, which you can directly run to chillers and HydroGENs, which require high pressure to operate correctly. The return lines from these pieces of equipment, if run this way, must not go into the manifold only back to the res.

33. Can I use any type of pump and fittings?

We cannot stress enough the importance of a strong pump - mag drive style pumps typically will not be strong enough or offer enough pressure to adequately power the system components (chillers, manifold delivery systems, etc..). In addition, quality tubing and hose clamps should be used when constructing your system.

34. Is there a way to create any fail-save system if my chiller goes down to keep my garden running?

Yes, you can also add water hose fittings with valves to your manifolds during construction so that in case there was any problems with you can use them to run a drain to waste system until your chiller is repaired or replaced. Attach the water hose to a tap and another water hose put down the drain. This way there would no interruption in your gardening while your chiller is being serviced.

HydroGEN

35. What pump size is needed for operating the HydroGEN?

If using a HydroGEN by itself we recommend a pump with at least 15' of lift with roughly 500 GPH, if using the HydroGEN with a small complete WCS that is using a submersible pump the HydroGEN will require its own submersible pump but can use the same reservoir as the rest of your cooling equipment. If using the original HydroGEN with a larger WCS that uses a powerful inline centrifugal pump it can be part of the system but since the unit is activated by water you will need a HydroGEN valve that is controlled by your CO2 monitor. If using a a HydroGEN PRO the system can be setup for constant water flow and would not require a HydroGEN valve. If using a MiniGEN no valve would be necessary, the co2 generator is already setup for constant water flow.

36. How do I calculate how much heat the HydroGEN outputs into my room, and thus how much chiller power I need?

If you are using a CO2 generator and you are venting your room you will add much more heat than if it were sealed and must be calculated differently. This is because the unit will have to power off and on to make up for the CO2 lost during the vent cycle, which causes heat each time. To calculate the chiller required for the HydroGEN or MiniGEN go www.hydroinnovations.com /products.htm and use the CO2 calculator to determine how much CO2 your room requires. This total will give you what it takes to bring the room from 500 to 1500. We can't calculate for you how much CO2 you will need an hour to maintain that. It depends on how sealed your room is and if you are doing any venting. Go to the charts there on the website to determine what size chiller you need keeping in mind that you may need less or more chiller than recommended based on your own particular situation.

37. What other ways can the heat output (in the form of the heated water) from the HydroGEN be cooled?

You can use an Ice Box to cool the water from the HydroGEN. If the hot water exit line is run through an ice box with fan attached it can greatly reduce the water temperature before returning to the res. This is an alternative to using a chiller, for extra efficiency the fan can be turned on and off with the hydrogen by connecting it to the CO2 controller. This icebox should be placed outside the grow room, however, so that the hot air byproduct of the cooled water is not re-introduced into your room, which defeats the purpose of using it.

38. I noticed that there used to be a natural gas HydroGEN, is it still available, or what happened to it?

The natural gas HydroGEN was discontinued because on the west coast the gas pressure is lower than the national standard in most cases. Even though other appliances work fine the HydroGEN will not function properly. It isn't dangerous, but in fact it will not stay lit. The reason is that there are several sensors inside that measure temperature to make sure that the flame is lit and that it is burning efficiently, the problem is that with lower gas pressure the flame doesn't burn hot enough to satisfy all of the sensors. Due to this and complaints from customers on non-performance, the model was discontinued.

39. Can I convert the unit from propane to natural gas?

Yes, propane to natural gas conversion kits are available. We recommend that you use the unit with propane for at least 4 weeks before making the conversion. If the unit doesn't run properly after the conversion you will know what the problem is and can switch it back. However, converting a HydroGEN voids the warranty of the unit.

40. Can I use the HydroGEN with a timer instead of a CO2 computer?

No, do not use the hydrogen with a timer, because of the high CO2 output, if the unit runs for 15 minutes in most gardens this would make the ppm's much too high and which could burn your plants. The unit must be controlled by a CO2 monitor / controller.

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Ice Boxes

41. How do the Ice Boxes work?

Hydro Innovations Ice Boxes are a real revolution in water-cooled indoor gardening. They are a safe and effective way to cool the air leaving your reflectors without adding AC or more fans. It uses a water to air heat exchanger to water-cool the hot air coming out of your reflectors as cool (or cooler than you want!) than the air entering them. Essentially, they are like the radiator in your car – cold water is passed through the Ice Box, a fan blows the hot air from your high-intensity bulbs through the Ice Box's chilled coils, with the resulting exiting air coming out cold.

42. Do I have to use RO water with Ice Boxes?

RO water is not necessary to use with the Ice Boxes but is necessary for the Fresca Sol water cooled units, since the water surrounds the bulb in these systems and should be clean and clear.

43. Do you have to use a manifold for small Ice Box systems?

In very small and simple setups you can daisy chain 2 units together because the water temperature will only have a small rise after the first Ice Box. For larger systems, however, we recommend using manifolds for water delivery to multiple Ice Boxes.

44. Do Ice Boxes add humidity to the room?

No, the Ice Box does not add humidity to the room b/c it is a sealed water system.

45. How do I mount Ice Boxes to my reflectors?

Use the self tapping screws with the Ice box to firmly attach it to the reflector, do not depend on tape to hold it in place

46. Do I have to use one Ice Box per reflector? Or can I use less Ice Boxes for multiple lights?

Less ice boxes can be used to cool the lights than what we recommend but in order to get good results your water has to be much colder which is inefficient. Anything that is colder than the room is absorbing heat from the room, the colder it is the more heat it absorbs putting more load on the chiller.

47. Should I use 6" Ice Boxes, or 8"? Which are better?

The 6" model has 36 square inches of surface area (6"x6"), while an 8" has 64 square inches (8"x8"). So the 8" Ice Box has almost double the cooling power due to higher heat exchange area than the 6".

Miscellaneous

48. If I water-cool, then I'm using air-cooled reflectors with glass between the bulbs and my plants – won't this decrease my lumens getting to my plants?

On average, putting glass between a bulb and your plants decreases lumen output by around 10%. However, because you can lower your lights closer to your plants due to the coolness of the bulb by using water-cooling, this decrease is negated. There is an inverse relationship between lumens and distance from your plants. If you were running uncooled reflectors, the heat would be so great that you would have to pull the lights higher away from the plants so as not to burn them – effectively losing lumens that way. So being able to lower the lights closer to the plant canopy using water-cooling often can give HIGHER lumen gains than the 10% loss of the glass.

49. How do I adjust the cooling of the CoolCoil nutrient cooler?

The CoolCoil nutrient cooler temperature can be adjusted manually by restricting the valve or by a thermostat and a valve that will open and close the valve as cooling is needed.

50. Some of the products you carry pass water through glass around a bulb and I'm afraid of water getting in contact with my bulbs – isn't that dangerous?

The type of water-cooled products that deploy the glass-tube design (Fresca Sol), have been engineered to be leak proof and have sealed gaskets to prevent water from entering the bulb. Significant tests and engineering has gone into the design of these units to prevent any water contact with the bulb, so water getting in contact with your bulb should not be a concern. Alternatively, if it is – then use the Ice Box method where no water is surrounding the bulb at all!

51. I live where it freezes during the winter, how do I make sure the water does not freeze in my chiller lines if the chiller is placed outside?

Food safe propylene glycol is recommended for all WCS but not necessary. This is a lubricant for all of the components and keeps the water cleaner by not allowing any corrosion to take place, you can run your water temperatures lower, and it protects your chiller from freezing up in case of pump failure or from environmental freezing outside.

52. All this water-cooling equipment seems much more expensive than normal indoor gardening, is it worth it?

Yes, water-cooled gardening equipment is more expensive and takes more time to setup but in the long run that expense and extra work are WELL worth it, especially if you can grow year round and are able to control your environment using more efficient water instead of AC. Once a WCS is dialed in it is very dependable and requires little maintenance. Like Ron Poipel says "set it, and forget it!